INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/35492

A. CLASSIFICATION OF SUBJECT MATTER IPC(7): H04B 1/38, 3/46; H04Q 7/20			
US CL : 375/219,224; 455/73,435.3			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 375/219,220,224,295,316;455/73,90.1,161.1,168.1,403,412.1,423,426.1,426.2,427,435.2,435.3			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.
x	US 6,192,224 B1 (GRAYSON et al.) 20 February 2001 (20.02.2001), column 1, lines 20-42, column 1, line 57 through column 2, line 49.		1-7, 10-17
A	US 6,400,946 B1 (VAZVAN et al.) 04 June 2002 (1-19	
A	US 6,453,155 B1 (HILL et al.) 17 September 2002 (17.09.2002), abstract, column 7, lines 11-65, Fig. 6.		
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Further documents are listed in the continuation of Box C. See patent family annex.			
* S	pecial categories of cited documents:	"T" later document published after the inte date and not in conflict with the applic	
	defining the general state of the art which is not considered to be that relevance	principle or theory underlying the inve	ntion ·
"E" earlier ap	plication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be consider when the document is taken alone	claimed invention cannot be red to involve an inventive step
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance; the	claimed invention cannot be
		considered to involve an inventive step combined with one or more other such	when the document is documents, such combination
"O" document	referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the	e art
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent family .1	
Date of the actual completion of the international search		Date of mailing of the international search report	
04 April 2004 (04.04.2004)			
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